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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,749	09/28/2001	Takumi Washio	WN-2387	3098

7590 06/30/2004

McGinn & Gibb, PLLC
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EXAMINER


COLEMAN, ERIC

ART UNIT	PAPER NUMBER
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2183

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/964,749	Applicant(s) WASHIO, TAKUMI 	
	Examiner Eric Coleman	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5,10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of meaning of the claimed limitation "date located in the address" in claims 5,10 (line 5) is unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,8-9,13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Suetake (patent No. 5,742,842).

Suetake taught the invention as claimed including a data processing ("DP") system comprising:

a) Processor unit (CPU, 801) which controls processing of an operation (e.g., see fig.4, col. 11, lines 21-46);

b) Additional processing units each of which corresponds to one of the memory banks and performs the operation independently of the processor unit, wherein the operation is performed about data stored in the corresponding memory bank based on an instruction or data provided from the processor unit (processing pipelines within the vector unit e.g., see fig. 10 and col. 11, line 55-col. 13, line 42)).

As per claim 2, Suetake taught the processing unit performing at least one of calculating the data, reading the data from the memory bank or writing the data to the memory bank (e.g., see col. 11, line 55-col. 13, line 42).

As per the additional limitations of claims 3,8,13,14 Suetake taught the address of the data in the memory bank was provided by the processor unit, and each of the additional processing units reads the data by referring to the address and performs the operation designated by the processor about the read data, and writes the result of the process into the location corresponding to the address (e.g., see col. 11, line 55-col. 13, line 42 and col. 17, lines 5-24).

As per claim 4,9, Suetake taught the additional processing unit received information from the processor unit and the operation designated by the processor was received information from the processor unit and operation designated by the processor was of the four basic operations of arithmetic, the additional processing unit performs one of the four basic operations using the read data and the received information (col. 11, line 55-col. 13, line 42).

Claim Rejections - 35 USC § 103

Claims 6,7,11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suetake (patent No. 5,742,842).

Suetake taught the invention as substantially as claimed including a data processing ("DP") system comprising:

a) Processor unit (CPU,801) which controls processing of an operation (e.g., see fig.4 , col. 11, lines 21-46);

b) Additional processing units each of which corresponds to one of the memory banks and performs the operation independently of the processor unit, wherein the operation is performed about data stored in the corresponding memory bank based on an instruction or data provided from the processor unit (processing pipelines within the vector unit (e.g., see fig. 10 and col. 11, line 55-col. 13, line 42)).

As per claims 6,7,11,12, Suetake did not specify the particulars of the CPU in his system. However one of ordinary skill in the DP art would have been motivated to take advantage technological advances in the art at the time of the claimed invention namely selecting a CPU the processes instruction in parallel and which has the capability of processing vector data. This would have provided a system with more system processing capability for the vector data processed by the Suetake system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gulick (patent No. 6,314,501) disclosed a system for operating multiple operating systems in different partitions of computer system allowing different partitions to communicate with one another through shared memory (e.g., see abstract).

Liao (patent No. 6,571,328) disclosed a system for obtaining a scalar value directly from a vector register (e.g., see abstract).

Ohtani (patent No. 5,517,666, disclosed a program controlled processor with a vector distributor (e.g., see abstract).

Liao (patent No. 6,571,328) disclosed a system for obtaining a scalar value directly from a vector register (e.g., see abstract).

Beard (patent No. 5,745,721) disclosed a partitioned addressing apparatus for vector/scalar registers (e.g., see abstract).

Song (patent No. 6,003,129) disclosed a multiprocessing system with a host process of the x86 processor type and a vector processor that has a SIMD architecture (e.g., see col. 3, line57-col. 4, line 65).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (703) 305-9674. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (703) 305-9712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2183

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC



ERIC COLEMAN
PRIMARY EXAMINER